

REMARKS

The Official Action mailed May 24, 2005, has been received and its contents carefully noted. Filed concurrently herewith is a *Request for One Month Extension of Time*, which extends the shortened statutory period for response to September 24, 2005. Accordingly, the Applicant respectfully submits that this response is being timely filed.

The Applicant notes with appreciation the consideration of the Information Disclosure Statements filed on August 11, 2004, and April 28, 2005.

Claims 31, 32, 35-43, 46-53 and 55-58 were pending in the present application prior to the above amendment. Dependent claims 57 and 58 have been canceled, and independent claims 31 and 43 have been amended to better recite the features of the present invention. Accordingly, claims 31, 31, 35-43, 46-53, 55 and 56 are now pending in the present application, of which claims 31 and 43 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

Paragraph 3 of the Official Action rejects claims 31, 32, 35-42, 55, 57, 43, 46-53, 56 and 58 under 35 U.S.C. § 112, second paragraph, asserting that "it is unclear as to which wiring is being referred by the limitation, 'said wiring'" (page 2, Paper No. 20050521). In response, independent claims 31 and 43 have been amended to recite a wiring provided with a second substrate, and a connecting wiring for electrically connecting the wiring of the second substrate to a thin film transistor over a first substrate, where the wiring of the second substrate is connected to a portion of the connecting wiring. The Applicant respectfully submits that the claims clearly recite a wiring of a second substrate and a connecting wiring; therefore, amended claims 31 and 43, and their dependent claims, are definite. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 112 are in order and respectfully requested.

Paragraphs 5-10 of the Official Action reject claims 31, 32, 35-43, 46-53 and 55-58 as obvious based on the combination of U.S. Patent No. 5,668,379 to Ono et al. and

U.S. Patent No. 5,608,559 to Inada et al., either alone or in combination with one or more of U.S. Patent No. 6,215,077 to Utsumi et al., U.S. Patent No. 5,821,159 to Ukita and JP 08-234212 to Hioki. The Applicant respectfully submits that a *prima facie* case of obviousness cannot be maintained against the independent claims of the present application, as amended.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims, as amended. Independent claims 31 and 43 have been amended to recite that a wiring of a second substrate is connected to a portion of a connecting wiring and that both side edges of the portion of the connecting wiring are in contact with an insulating film. These features are supported in the specification, for example, at Figures 1, 12A and 12B and at page 8, lines 1-13.

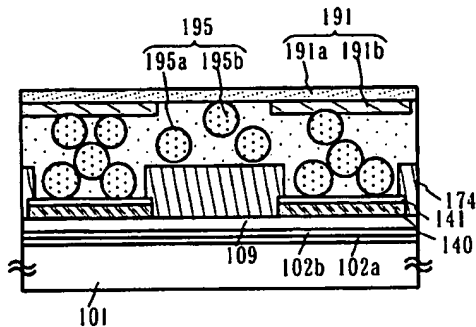


FIG. 5 and FIG. 7 are cross-sectional views of a semiconductor device. FIG. 5 shows a device with layers GTM, PSV1, d1, d0, AS, GI, and SUB1, with a gate structure GL(g1). FIG. 7 shows a similar device with layers d2, d1, d0, AS, GI, PSV1, DTH, and SUB1.

The Applicant respectfully submits that Ono discloses that an insulating film is removed at a portion where the connecting wiring is connected to the wiring of the second substrate in order to connect the connecting wiring and the wiring of the second substrate. However, Ono fails to teach or suggest that a wiring of a second substrate is connected to a portion of a connecting wiring and that both side edges of the portion of the connecting wiring are in contact with an insulating film as claimed in the present application and shown, for example, in Figures 12A and 12B.

Inada does not cure the deficiencies in Ono. Although the Official Action refers to "connecting wiring 66a" (top of page 5), the Official Action also cites "Fig. 6, col. 8, lines 55-60" of Inada for support. However, Figure 6 and column 8, lines 34-60, appear to be directed to wiring 46a. Also, reference number 66a does not appear in Figure 6. As such, as best understood, it appears that the Official Action is asserting that Inada teaches connecting wiring 46a connected to the TFT (page 3, Paper No. 20050521). (In the event the Applicant's understanding is incorrect, the Applicant respectfully requests clarification.) The Applicant respectfully disagrees and traverses the above-referenced assertion in the Official Action.

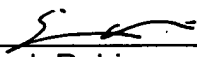
Inada cannot teach that connecting wiring 46a is connected to a TFT, because Inada appears to disclose that the connecting wiring 46a has a Ta film 29, a Ti film 40 and an ITO film 30 (column 7, lines 10-15; see also FIGS. 5-7) and that the Ta film 29 constitutes a TFT gate electrode 302a, the Ti film 40 constitutes a source electrode 307 and a drain electrode 308 and the ITO film 30 constitutes an ITO transparent conductive film 309 to be a pixel (column 14, lines 35-41; see also FIG. 14). That is, connecting wiring 46a is part of a TFT. Specifically, Inada does not teach or suggest that the connecting wiring comprising a metallic film and a transparent conductive film is electrically connected to the TFT because the source electrode 307 and the drain electrode 308 are not formed from the Ta film 29 and the ITO film 30, but only from the Ti film 40. Therefore, Inada does not teach or suggest a connecting wiring electrically connected to a TFT.

Utsumi, Ukita and Hioki do not cure the deficiencies in Ono and Inada. The Official Action relies on Utsumi, Ukita and Hioki to allegedly teach the features of the dependent claims. However, Ono, Inada, Utsumi, Ukita and Hioki, either alone or in combination, do not teach or suggest that a wiring of a second substrate is connected to a portion of a connecting wiring and that both side edges of the portion of the connecting wiring are in contact with an insulating film; or a connecting wiring electrically connected to a TFT.

Since Ono, Inada, Utsumi, Ukita and Hioki do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



Eric J. Robinson
Reg. No. 38,285

Robinson Intellectual Property Law Office, P.C.
PMB 955
21010 Southbank Street
Potomac Falls, Virginia 20165
(571) 434-6789